Brief Description of Catalog Items
Forest Management Technical Working Group

(Recently enacted policies and programs in Washington State are listed where relevant (see italics). Note that this listing is incomplete and will be fleshed out during the TWG process; working group members are encouraged to provide input to the TWG facilitators on existing policies and programs, where relevant.)

F-1 FORESTRY – PRODUCTION OF FUELS AND ELECTRICITY IN FORESTRY

1.1 Expanded Use of Biomass Feedstocks for Electricity, Heat and Steam Production

Increase the amount of biomass available for generating electricity and displacing the use of fossil energy sources.

Recent Actions in WA: The 2006 Energy Independence Act (Initiative 937) established renewable portfolio standards. Large utilities (25,000 customers and over) are required to obtain 15% of their electricity from new renewable resources such as solar and wind by 2020 (3% in 2012 -- 9% in 2016 -- and 15% in 2020) and undertake cost-effective energy conservation. The RPSs affect 95% of the electric generation in the State.

1.2 In-state Liquid Biofuels Production

Increase production of ethanol and/or biodiesel fuel from agriculture and/or forestry feedstocks (raw materials) to displace the use of fossil diesel. Promote the development of cellulosic ethanol technologies and ethanol production systems that use renewable fuels to improve the embedded energy content of ethanol. Increased production and consumption in state give the highest benefits.

Recent Actions in WA: Washington State has passed into law several requirements and incentives supporting an in-state biodiesel and ethanol industry: HB 1240 to 1243, tax and use incentives to encourage production and use of biodiesel and ethanol; EO 04-06, Sustainability and Efficiency Goals for the State Operations; ESSB 6508, establishing minimum renewable fuel content requirements and fuel quality standards; HB 2939, appropriated $17 million for the Energy Freedom Loan Program to develop bioenergy R&D, crops, and markets (Agriculture only); RCW 82.08.020, Sales of machinery, equipment, vehicles, and services related to wood biomass fuel blend, in 2003, a sales tax exemption covering the purchase of machinery, equipment, and buildings used for retailing wood biomass fuel blend (containing at least 20% wood biomass fuel by volume) was passed (exemption expires June 30, 2009)

Currently the biodiesel production in the State, from 15 facilities on line or in serious planning/development, is about 270.5 million gallons per year. Biodiesel is sold at 35 stations in Washington.

Ethanol production is about 435 million gallons per year from seven facilities in the permitting/planning stage. Ethanol is a fuel derived from grain, usually corn, sugarcane or other biomass sources. E-85 can be used in the new Flexible Fuel Vehicles is an 85-percent ethanol/15-percent gasoline blend. There are four E-85 fueling stations in the State.

1.3 Improved Energy Capture from Wood Waste Combustion

Reduce emissions and increase heat efficiency from heat sources such as wood burning stoves and furnaces.

1.4 Improved Commercialization of Biomass Gasification and Combined Cycle

Improve the rate of technology development and market deployment of biomass gasification and combined cycle (BGCC) technologies. These technologies expand the application of renewable fuels derived from biomass.

F-2 FORESTRY – BIOMASS PROTECTION AND MANAGEMENT

2.1 Forest Protection – Reduced Clearing and Conversion to Nonforest Cover

Reduce the rate at which existing forest are cleared and converted to developed uses. Much of the carbon stored in forest biomass and soils can be lost as a result of such a land use conversion.

2.2 Urban Forestry

Maintain and improve the health and longevity of trees in urban and residential areas to protect and enhance the carbon stored in tree biomass. Indirect emissions reductions may also occur by reducing heating and cooling needs as a result of planting shade trees.

2.3 Afforestation/Reforestation

Establish forests on land that has not historically been forested (e.g., agricultural land) ("afforestation"). Promote forest cover and associated carbon stocks by regenerating or establishing forests in areas with little or no present forest cover ("reforestation"). In addition, implement practices such as soil preparation, erosion control, and stand stocking to ensure conditions that support forest growth.

2.4 Forest Management for Carbon Sequestration

Forest management activities that promote forest productivity and increase the rate of carbon dioxide sequestration in forest biomass and soils and in harvested wood products. Practices may include: increased stocking of poorly stocked lands, age extension of managed stands, thinning and density management, fertilization and waste recycling, expand short rotation woody crops (for fiber and energy), expanded use of genetically preferred species, modified biomass removal practices, fire management and risk reduction, pest and disease management.

Applies to 2.1-2.4: Recent Actions in WA: The Washington Department of Natural Resources (DNR) has been working collaboratively with various stakeholders to build on the 2005 West

Coast Carbon Sequestration Partnership[1] (WESTCARB). DNR and WESTCARB produced an inventory of terrestrial carbon sequestration opportunities in Washington State.

F-3 FORESTRY – WOOD PRODUCTS AND WASTE

3.1 Improved Mill Waste Recovery

Improve treatment and cleaning of waste materials from paper mills, which can then be re-used to manufacture additional wood products. Ensure that sawmill byproducts are recycled.

3.2 Improved Logging Residue Recovery

Use more efficient logging methods to fully utilize harvested trees, which will minimize carbon losses from wood damaged during harvesting and maximize the potential for carbon sequestration in harvested wood products. Process the logging remains efficiently.

3.3 Expanded Use of Wood Products for Building Materials

Increase the amount of renewable wood products used for residential and commercial building. The use of wood products in place of other building materials can increase carbon sequestration in wood products and displace GHG emissions associated with processing high-energy input materials such as steel and concrete. Reduction potential is enhanced by promoting the use of locally-grown wood.

[1] For more information, go to the WESTCARB website: www.westcarb.org